

FIELD

Spring 2009

THE FIELD MUSEUM'S MEMBER PUBLICATION



Discover Real Pirates

ALSO INSIDE:

**HOW THE TURTLE GOT ITS SHELL
MASTERPIECES OF ANCIENT JEWELRY**



EDITOR:

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The Field Museum

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COVER, RIGHT:

Infamous pirate and captain of
the *Whydah*, Sam Bellamy.

ARTIST RENDERINGS BY GREGORY
MANCHESS © ARTS AND EXHIBITIONS
INTERNATIONAL

COVER, LEFT:

18th century Spanish coins found
at the *Whydah* shipwreck site.

PHOTO BY KENNETH GARRETT
©2008 NATIONAL GEOGRAPHIC

The Field
Museum

1400 South Lake Shore Drive
Chicago, IL 60605-2496
312.922.9410
www.fieldmuseum.org

The Field Museum salutes
the people of Chicago for their
long-standing, generous support
of the Museum through the
Chicago Park District.

save the date!

Treasures and gems await you!

The Field Museum is filled with exciting exhibitions and activities this spring. First, there is the tale of *Real Pirates: The Untold Story of the Whydah from Slave Ship to Pirate Ship*. The story unfolds on page 4 about this special exhibition which opens Feb. 27. And of course as a member, in addition to free basic admission, you receive free special exhibition tickets based on your membership level!

The treasures continue with over 100 pieces of jewelry and accessories featured in *Masterpieces of Ancient Jewelry* (page 3). Then rediscover the hidden gems of those slightly quieter Museum exhibition areas featured in the article on page 13. What a great way to spend a winter day!

And make sure you save the dates for **Members' Nights, March 12 and 13**. Talk about treasures and gems—for two nights the entire Museum is open to members and their guests! Members have the opportunity to go behind the scenes, explore our vast collection and meet our staff and scientists. See the information on page 16 and don't forget to call and reserve your tickets for our biggest member event of the year.



DIANE ALEXANDER WHITE

Thank you for your support. And always keep
rediscovering The Field Museum!

Michelle Clayton
Director of Membership



Museum Campus Neighbors

Shedd Aquarium is reimagining the Oceanarium!

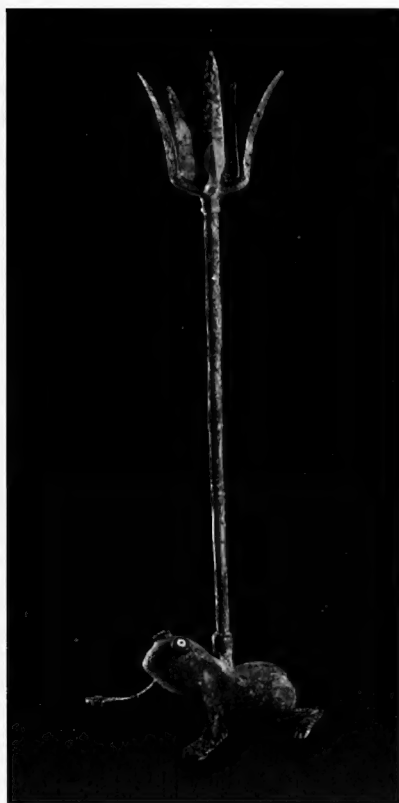
Don't miss the grand reopening in June. Welcome back the dolphins, beluga whales, sea otters, and penguins, and meet new residents of the Pacific Northwest Coastal ecosystem. For more information visit www.sheddaquarium.com or call **312.939.2438**.

Adler Planetarium Join Big Bird and his friends from

Sesame Street as they explore the night sky in *One World, One Sky: Big Bird's Adventure*, now showing in the Adler's Definitive Space Theater. Also, to celebrate the 400th anniversary of the telescope, the Adler will open a telescope exhibition in May. For more information visit www.adlerplanetarium.org or call **312.922.STAR**.

Exquisite Jewels from Ancient Times

A strand of pearls against a little black dress. A diamond wedding band glittering in the sun. A pair of cufflinks worn only on special occasions. Men and women alike have adorned themselves with beautiful jewelry throughout the ages.



Above: A pair of gold bracteates from 4th century Persia (top). It is assumed this Kish frog stand was used to hold a goblet (bottom).

Right: Gold bracelet, with glazed quartz, ruby and garnet (left). Lapis lazuli and gold pendant in the shape of ram's head (middle). Gold pendant with pair of birds (right).

The Museum's new exhibition *Masterpieces of Ancient Jewelry: Exquisite Objects from the Cradle of Civilization* (through July 5) features stunning jewelry—some pieces nearly 5,000 years old—that illuminates the culture and customs of ancient Mesopotamia, Egypt, the Levant, Persia, and the Islamic Middle East. After a brief stay in the exhibition, it is easy to see why these artifacts are not only gorgeous accessories, but delicate works of art as well.

One particularly exquisite Levantine necklace consists of 244 carnelian and gold beads. The carnelian beads are in the shape of pomegranates and surround a tiny gold spacer with a depiction of the Egyptian goddess Hathor, the goddess of love and joy. Created using the repoussé technique, this piece is extremely important as it indicates the increasing contact between cultures at the time of the necklace's creation.

Another beautiful piece is a gold pendant, decorated with a pair of "kissing" birds (*below, right*). It was created using a technique called granulation, a painstaking process in which tiny, gold spheres are attached to the same metal. Granulation involves a jeweler's skill and a scientific knowledge of metals. The gold spheres must be hot enough to stick together, but cool enough to keep their shape. The technique which creates a delicate, yet beautiful piece, is still used in jewelry making today.

Jewelry and other objects from The Field Museum's remarkable collection from the 5,000-year-old city of Kish (in modern-day Iraq) complements the exhibition. Karen Wilson, Kish Project coordinator says, "We are delighted that objects from this extraordinarily important Mesopotamian city, some of which have never before been exhibited, are able to be a part of this beautiful exhibition." **ITF**

Masterpieces of Ancient Jewelry: Exquisite Objects from the Cradle of Civilization is organized by the National Jewelry Institute.

Support generously provided by Feitler Family Fund and Ptah Sekhmet; PaxVobiscum Inc.

PHOTO CREDITS (COUNTER-CLOCKWISE FROM TOP): BRUCE M. WHITE © 2002 TRUSTEES OF PRINCETON UNIVERSITY; A114646D_05A/JOHN WEINSTEIN; © 1980 THE METROPOLITAN MUSEUM OF ART; PETER LANYI © THE ISRAEL MUSEUM, JERUSALEM; © THE METROPOLITAN MUSEUM OF ART



'...these artifacts are not only gorgeous accessories, but delicate works of art as well.'



Discover Real Pirates

By Orly Telisman, Manager of Media Relations

The classical age of piracy comes to life when The Field Museum welcomes *Real Pirates: The Untold Story of the Whydah from Slave Ship to Pirate Ship*. The exhibition showcases more than 200 artifacts including everyday objects, personal items, and treasures from the first fully-authenticated pirate ship ever to be discovered in U.S. waters. The exhibition runs from Feb. 25 to Oct. 25, 2009.



Artist's rendering of Whydah capture.

Top, left: West African Akan gold pendant and a scale model of the Whydah. Top, right: Booty onboard the Whydah and a loaded cannon.

Real Pirates tells the true story of the *Whydah*—a real pirate ship that sank off the coast of Cape Cod nearly 300 years ago. The exhibition features treasure chests of gold coins and jewelry, as well as technically advanced weaponry of the time—18th century cannon, pistols, and swords. These artifacts were painstakingly recovered from the ocean floor to form the core of this exhibition. “This isn’t fantasy—it is the real pirates’ treasure that bears witness to this ship’s fate,” said Scott Demel, PhD, Field Museum head of collections management.

Several galleries showcase this period of history, including the slave trade based in West Africa and the economic prosperity in the Caribbean. Visitors can get a sense of everyday life aboard the *Whydah* pirate ship, and meet Captain Sam Bellamy, one of the boldest and most successful pirates of his day. Continue on the journey with Bellamy as he sails, looting dozens of ships before a violent storm sank the vessel off the coast of Cape Cod, Massachusetts, April 26, 1717.

Visitors can hoist a pirate flag, tie pirate knots, and enter the ship as the pirates did, by ducking through a large wooden door and going “below deck” of the *Whydah* in a life-size replica of the ship’s stern.

Real Pirates also shares the stories of several members of the *Whydah* crew—such as John King, the youngest-known pirate on board the *Whydah*, who was believed to be younger than 11 years old at the time of the shipwreck.

A three-masted, 300-ton pirate ship, the *Whydah*, was built as a slave ship in London in 1715. She embodied the most advanced ocean-going technology of her day—easy to maneuver, unusually fast and, to protect her cargo, heavily armed and ready for battle. She was built to transport human captives from the West Coast of Africa to the Caribbean—but only made one such voyage before being captured near the Bahamas by Captain Bellamy.

On April 26, 1717, the *Whydah*, heavy with loot from more than 50 captured ships, sank during a powerful nor’easter storm off the Massachusetts coast. Only two of the 146 people onboard made it ashore.

Nearly 300 years after the *Whydah* sank, the ship was located by underwater explorer Barry Clifford. He is still actively excavating the wreck site and continues to bring artifacts to the surface that shed light on this tumultuous period of American and world history. At the end of the exhibition, visitors can learn how Clifford discovered the ship and can delve deeper into the extensive recovery and conservation process. **17F**

An Exhibition from National Geographic.
Organized by Arts and Exhibitions International.

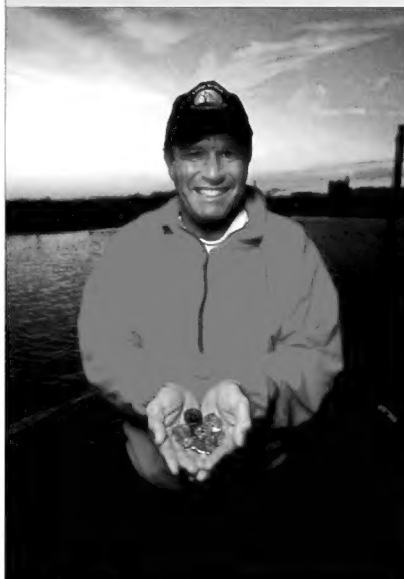
Welsh “good luck” gold ring.

BILL CURTSINGER © 2008 NATIONAL GEOGRAPHIC



Searching for Shipwrecks: A Conversation with Barry Clifford

Barry Clifford is among the world’s best known underwater explorers and has been involved in underwater surveys and excavations most of his adult life. In 1984, Clifford, a former high school teacher, made headlines with his discovery of the remains of the *Whydah*, which wrecked in a storm off Cape Cod in 1717. Clifford tells more about the discovery of the *Whydah*.



BILL CURTSINGER © 2008 NATIONAL GEOGRAPHIC

What made you decide to explore underwater archeology as a career?

I’ve always had a great interest in shipwreck history but also wanted to be able to continue teaching. Recovering artifacts, conserving them, and then presenting them to the public is a perfect blend of both worlds.

What was the most exciting discovery in the recovery of the *Whydah*?

The very first artifact we uncovered was a piece of eight (a Spanish coin about the size of a silver dollar) dated 1684. At that point, I was sure we had found the ship.

What does the recovery process entail?

Working off Cape Cod is complicated because the remains of the ship are buried under 10 to 30 feet of sand. This means you have to dig through about 30 feet of sand (called “the graveyard”), before you can begin the recovery process. The sand can collapse on top of you, so we have to be extremely careful. The sand is continuously shifting, so we have to repeat this process multiple times.

Once we bring artifacts up to the surface, everything is taken to the lab. Concretions are stabilized in de-ionized water and await conservation.

What do you hope visitors take away after viewing *Real Pirates*?

It’s interesting that the *Whydah* started out as a slave ship—that at the time, it was legal to buy and sell people. Once it became a pirate ship, though, these men became outlaws. Many of the pirates were of African and Native American origin and had been former slaves. But the pirates were experimenting with democracy, and so now these former slaves were free. We’ve learned that a number of them were elected by the pirates as officers and captains of predominantly white crews. There’s a certain degree of irony there.

I also want visitors to understand that *Real Pirates* is a unique, once-in-a-lifetime opportunity to see artifacts from the first, fully-authenticated pirate shipwreck ever found in U.S. waters. It’s not Hollywood; it’s not Robert Louis Stevenson; it’s real.

Our Great Lakes: With Great Benefit, Comes Great Responsibility

A Conversation with Laurel Ross

By Emily J. Waldren, Editor

With Lake Michigan right outside our doorstep, it's easy to forget about the importance of water conservation. But Laurel Ross, urban conservation director at The Field Museum knows that water, a valuable resource we may take for granted, needs the same protection we give our other natural resources. In anticipation of the summer exhibition *Water* (June 17–Sept. 20), ITF spoke to Ross about some of the Museum's water conservation efforts and the simple things you can do to help.



Urban Conservation Director Laurel Ross

ITF: *Why should the average Chicagoan care about water conservation issues?*

Ross: Water is essential for life on Earth. In addition to drinking water, people depend on the availability of healthy water resources for transportation, recreation, power, agriculture, and sanitation. Most people on Earth struggle to get the water they need for survival. Here in the Great Lakes region, with 20 percent of the world's fresh water supply right outside our door, it might be tempting to think we are exempt, but with the benefits of this great resource comes the responsibility to protect, manage, and restore the entire ecosystem—the rivers, streams, wetlands, and groundwater—so that our water is, and will be, safe for drinking, recreation, and habitat. Great Lakes cities like Chicago are working together and are committed to regional water conservation measures. We are also investing in maintenance of aging infrastructure, because our economies are dependent upon the tourism and commerce that the lakes support. The very existence of our city was determined by the strategic location of waterways that provided connections between the industrial East and the undeveloped West of this continent. Our water resources are no less important today.

ITF: *How does Field Museum science impact water conservation?*

Ross: Museum scientist Dr. Phil Willink is an expert on Chicago region aquatic communities and his work provides critical data that informs the decisions of policy makers. He stresses that we can indirectly measure the impact of people by monitoring aquatic organisms.

Wolf Lake (half in Chicago and half in Hammond, Indiana) is an excellent example. Field Museum scientists have been collecting fishes there since 1898. As factories, homes, and highways were constructed over the years, scientists have seen aquatic habitats degrade. Rare and environmentally sensitive fishes have been eliminated and invasive species have moved in. By understanding the history of our actions, we now have a better understanding of how our future efforts might impact aquatic ecosystems.



GN90462_200/JOHN WEINSTEIN

Get Your Feet Wet During Water Chicago

By Johanna Thompson, Student Programs Administrator

The Field Museum is launching **Water Chicago** in an effort to teach families about the importance of water and water conservation topics. As we gear up for our summer exhibition, *Water* (June 17–Sept. 20), the Museum will be your source for water programs, activities, and events!

Join us on March 22 for our **World Water Day Festival** when the Museum will be drenched in water activities! You and your family can participate in UNICEF's Tap Project Water Walk, a one-mile walk to support solutions for the global water crisis. To register, call 1.800.PROJ.TAP. Following the walk, join us for family workshops in the *Crown Family PlayLab* and on the Museum's ground floor for a hands-on Sewer Science demonstration by a water expert from the Metropolitan Water Reclamation District of Greater Chicago. Learn the extensive process water goes through after it goes down the drain.

Be the first to use our **Water Calculator** (fieldmuseum.org/watercalculator), an online tool that will allow users to calculate their daily, weekly, and monthly water usage. Families and schools can calculate their water usage and also get tips and tricks on how to conserve water. Those that use the Water Calculator to reduce their water usage in April and May have a chance to win a boat trip to and tour of the Harrison-Dever Water Intake crib two miles east of Navy Pier in Lake Michigan, courtesy of the Department of Water Management. The Chicagoland area uses over one billion gallons of water every day, and this highly-secured facility provides over 650 million gallons of that water!

Professor and author Jeffrey Sachs will speak at the **Comer Symposium** on May 13. He will discuss water as it relates to poverty, health, and the economy. On June 25, the Museum will host **Café Science: Water** at the Hopleaf Bar. Hear Museum scientist Scott Demel speak about the Great Lakes' ecosystems and how invasive species have affected our local waters. See program calendar for more information on both these events.

Join us for **Water Chicago** to get your feet wet with our water programs and then visit us again this summer for the opening of the exhibition *Water*. Be sure to read the next issue of *ITF* for more information on this exciting exhibition.

Water Chicago is made possible by the Department of Water Management of the City of Chicago and the Metropolitan Water Reclamation District of Greater Chicago.

The Comer Symposium is presented by The Gary C. Comer Family.

Sometimes monitoring brings us good news. During a recent routine survey a small catfish called the Freckled Madtom was discovered in the Des Plaines River, *the first time in over 100 years* that this environmentally sensitive species has been found near Chicago! We hope that this is an indication of decreasing pollution and improving health of regional waterways.

ITF: *How can the average person make a difference?*

Ross: Every little positive change in our daily habits makes a contribution to the big picture. The simple act of paying attention to how we use and dispose of water can help us to make dozens of better small decisions every day. The choices we make in washing our cars, dishes and clothes really matter. Whether we choose water-hungry lawns or water-conserving native plants in our yards makes a difference. Native landscaping has multiple benefits because these plants have deep roots that hold water in the ground during heavy rain events, reducing the amount of water our aging sewers must handle and thereby reducing flooding. It may seem extreme to consider a green roof, rain barrels, or a rain garden, but these are increasingly popular and are more easily available than ever before.

But our responsibility goes beyond our actions today. In 2009 we will celebrate the centennial of Daniel Burnham's Plan of Chicago, the far-reaching vision that has guided the growth and development of our region for the past hundred years. Respect for natural resources was a hallmark of that plan and we can see the results of that in such magnificent examples as our beautiful lakefront and our world class forest preserves. As we look ahead to the next hundred years, it is incumbent on us to be informed citizens and to continue that legacy of conservation. **ITF**

'Every little positive change in our daily habits makes a contribution to the big picture.'

VISIT WWW.EPA.GOV/GREENACRES AND WWW.CITYOFCHICAGO.ORG/ENVIRONMENT FOR MORE INFORMATION ON NATIVE LANDSCAPING, GREEN ROOFS, AND RAIN BARRELS.

A Greener Way: The Comer Symposium and the Banff Mountain Film Festival

By Krystal Villanosa, Writer

While it has always been a part of The Field Museum's mission to pursue green initiatives through research and education, the current global warming crisis and its associated effects on the environment have added urgency to our mission. This spring, the Museum will host two programs for adults and teens focused on environmental issues: the Banff Mountain Film Festival and the Comer Symposium.



CORY RICHARDS

The Banff Mountain Film Festival brings mountain stories to life through spectacular images and captivating sounds. You'll experience the adventure of climbing ice and rock, cycling, and snow skiing—all captured on the big screen. While these films are sure to get your adrenaline going, at the heart of the Banff Mountain Film Festival is the celebration of mountain culture and wildlife as well as an awareness of environmental issues. Its goal is to create opportunities for people to find inspiration through mountain experiences, ideas and challenges.

The Comer Symposium, the second in a five-year series of symposia which raises awareness of global environmental issues, will focus on water and cover topics ranging from water and poverty, water and health, and water as a commodity. *Water: Sustaining Our Blue Planet* features Jeffrey Sachs, a leading international economist whose primary focus is the alleviation of global poverty. Dr. Sachs (pictured below) is a professor at Columbia University, director of The Earth Institute, and has authored *Common Wealth* and *The End of Poverty*.

Whether you are a self-described tree hugger, an adventure seeker, or nature enthusiast, these programs offer something unique that makes for a very special Field Museum experience. **ITF**

Stories of thrilling outdoor activities are featured in the Banff Mountain Film Festival.

BANFF MOUNTAIN FILM FESTIVAL PHOTOS
COURTESY OF THE BANFF CENTRE



DAVID SIMMONITE



IIRO SEPPANEN

Banff Mountain Film Festival

WEDNESDAY, APRIL 29 & THURSDAY APRIL 30, 6–9pm both nights

Two night package: \$18, \$14 members

Reserve your seats now as space is limited!

Call 312.665.7400.

For a list of films, visit the Museum's website.



ARNOLD ADLER

Comer Symposium featuring Jeffrey Sachs

WEDNESDAY, MAY 13, 7pm

Free; Pre-registration required.

Call 312.665.7400.

Presented by The Gary C. Comer Family

Field memberships make great gifts!

Call 312.665.7700 • M–F 8:30am–4:30pm

Visit www.fieldmuseum.org/membership

MARCH-JUNE

The Field
Museum

program calendar

SPRING 2009



BANFF MOUNTAIN FILM FESTIVAL



DIANE ALEXANDER WHITE



REBECCA REEVES GAINES

Expect an adventure this spring at The Field!

THE BANFF MOUNTAIN FILM FESTIVAL For Adults

The Banff Mountain Film Festival brings mountain stories to life through spectacular images and sound. You'll experience the adrenaline rush of free falling, alpine climbing and skiing, and mountain biking—all captured on the big screen. Come and see stunning cinematography from internationally acclaimed films and help us celebrate the spirit of outdoor adventure.

APRIL 29 & 30 • \$10/night, members \$8/night • Film screening begins at **6pm** on both nights. Pre-registration is required. Call 312.665.7400 or visit fieldmuseum.org to purchase your tickets online.

The Banff Mountain Film Festival is presented by National Geographic and New Balance.

WATER: SUSTAINING OUR BLUE PLANET For Adults PRESENTED BY THE GARY C. COMER FAMILY



ARNOLD ADLER

This roundtable discussion, moderated by WGN radio host John Williams and featuring Jeffrey Sachs, Director of The Earth Institute at Columbia University and Peter Annin, author of *The Great Lakes Water Wars*, will cover topics ranging from water as it relates to poverty and health, water as a commodity, and how climate change is affecting water resources. Potential solutions to these problems will be addressed and local as well as global water issues will be highlighted.

MAY 13, 7pm • FREE • Pre-registration required. Call 312.665.7400.

DOZIN' WITH THE DINOS! For Families

Dozin' with the Dinos is a unique opportunity for families with children ages 6–12 to spend the night at The Field! Overnights are scheduled for the following FRIDAYS in 2009.

MAY 15 & 29 • JUNE 26 • AUGUST 14 • NOVEMBER 20 & 27

NEW FOR 2009!

Families can sign up for Premium Package 1 and sleep in our *Evolving Planet* exhibition, or book Premium Package 2 and sleep in our *Evolving Planet* exhibition and add a behind-the-scenes tour with a Field Museum scientist!

Overnights begin at 5:45pm and end the following morning at 9am. No one will be admitted after 8pm.

Standard Overnight: \$60/families, \$50/members and groups

Premium Package 1: \$72/families, \$62/members; **Premium Package 2:** \$85/families, \$75/members

Pricing is per person. Pre-registration is required. Visit fieldmuseum.org/overnights.

PROGRAM TICKETS & INFO > 312.665.7400 GENERAL MUSEUM INFO > 312.922.9410 VISIT > www.fieldmuseum.org

Exchanges will be issued by Field Museum staff for family overnights only; groups are not eligible for exchanges. Cancellations must be made 48 hours in advance of the overnight. No refunds or exchanges are permitted for any other program. Fees for programs that are cancelled by The Field Museum will be refunded in full.

march

MICHAEL HERALDA'S AZTEC STORIES* Performance

Through a presentation of ancient poetry, narratives, oral tradition stories, and ballads, join us for a celebration of the culture of ancient Mexico and the indigenous worldview of the Aztecs.

MARCH 7, 12pm

NATIONAL GEOGRAPHIC LIVE!

CELTIC HEART, CELTIC SOUL Adult Lecture

From highland games in Scotland to mountain steam trains in Wales, photographer Jim Richardson will share stories of sunrise among the standing stones, singing sea shanties in pubs, and tasting raw whisky straight from the cask.

MARCH 10, 7:30pm • pricing starts at \$22

FOSSIL HUNT AT MAZON CREEK Family Field Trip

Do you like to hunt fossils? Come with us to the world-famous Mazon Creek site, and discover what Illinois was like more than 300 million years ago! Plan on a one-quarter mile walk to fossil locations. For families with children ages 8–17.

MARCH 21, 8am–3pm • \$40, members \$28

Pre-registration required.

SCIENTISTS AT THE FIELD: HOW PROTECTED

WILDLIFE AREAS MAKE A DIFFERENCE* Demonstration

Meet with scientists who are working to protect wildlife habitats in areas like the forests of South America and the wetlands around Chicago. Discover how you can be a volunteer and take part in these stewardship initiatives.

MARCH 21, 11am–2pm

THE STORY BEHIND THE IMAGES WITH

PHOTOGRAPHER FLORIAN SCHULZ* Adult Program

Join us for a viewing of the photographic exhibition *Yellowstone to Yukon*. Enjoy breathtaking images of Northern Rocky Mountain landscapes as award-winning photographer Florian Schulz shares the story behind each image.

MARCH 21, 11:30am & 1:30pm

ARTISTS AND AUTHORS PRESENT: MELINDA LONG*

Family Program

Listen to the adventures of young Jeremy Jacobs as he learns how to become a pirate. Melinda Long will read from her book *How I Became a Pirate*. A book signing to follow.

MARCH 21, 1:30pm

WORLD WATER DAY FESTIVAL* Family Program

We invite you to celebrate World Water Day with us! From family workshops on water in the Crown Family PlayLab to Sewer Science demonstrations on the Ground Level, soak up World Water Day at The Field Museum.

MARCH 22, 10am–2pm

april

NATIONAL GEOGRAPHIC LIVE!

SECRETS OF SHANGRI-LA Adult Lecture

Travel with Himalayan Mountaineer Pete Athans to explore this remarkable Tibetan site that is shedding light on the spread of Buddhism through the Himalaya.

APRIL 21, 7:30pm • pricing varies

NON-MEMBER: patron \$30, unreserved \$24

MEMBER: patron \$28, unreserved \$22

STUDENT/EDUCATOR: unreserved \$18

SURVIVAL OF THE SWIFTEST, SMARTEST, OR FATTEST? HUMAN EVOLUTION 150 YEARS AFTER DARWIN*

Adult Lecture

Rediscover Charles Darwin's *Origin of the Species* and learn where, when, and how humans have evolved. Join Professor Daniel E. Lieberman of Harvard University as he outlines major episodes of natural selection and also discusses how current western lifestyles have resulted in dys-evolution. This lecture is offered in collaboration with the Leakey Foundation.

APRIL 4, 1pm • Pre-registration required.

FOSSIL HUNT AT MAZON CREEK Family Field Trip

Do you like to hunt fossils? Come with us to the world-famous Mazon Creek site, and discover what Illinois was like more than 300 million years ago! Plan on a one-quarter mile walk to fossil locations. For families with children ages 8–17.

APRIL 18, 8am–3pm • \$40, members \$28

Pre-registration required.

*FREE WITH MUSEUM ADMISSION WWW.FIELDMUSEUM.ORG

lecture series!

THE AZTEC WORLD LECTURE SERIES presented by The Field Museum and Northwestern University

Explore the grandeur and sophistication of one of history's greatest civilizations—the Aztec Empire. Find out how a community that began in the middle of a lake eventually became the capital of an empire whose ingenuity, artistry, and social customs can still be seen in the present day.

This lecture series is offered in collaboration with Northwestern University and The Consulate General of Mexico.

MARCH 5, 6pm: Aztec Environmental Management

MARCH 19, 6pm: Archaeology of a Provincial Town

MARCH 26, 6pm: The Aztec Sense of History

APRIL 9, 6pm: Women and the Aztec State

\$9, students/educators \$8, members \$5

Pre-registration recommended.

Montgomery Ward Hall, Ground Level

*FREE WITH MUSEUM ADMISSION WWW.FIELDMUSEUM.ORG

may

june

KRAFT STORY TIME* Family Program

Take a seat in the Crown Family PlayLab to hear a story and make an art project to take home—all in 20 minutes!

SATURDAYS & SUNDAYS, 11:30am & 1:30pm

TWO OF US: GROWING A GARDEN* Family Program

Flowers, trees, and plants of all kinds are needed for a healthy garden. Inch by inch and row by row, come make a garden grow. Join us in the Art Studio of the Crown Family PlayLab to learn more!

MONDAYS IN MAY STARTING MAY 4, 10–11am

USDA SCIENTISTS AT THE FIELD Demonstration

Visit *Underground Adventure* and get a chance to see and feel different soil types!

MAY 13, 11am–2pm

Free with admission to *Underground Adventure*.

WATER: SUSTAINING OUR BLUE PLANET Adult Lecture PRESENTED BY THE GARY C. COMER FAMILY

This roundtable discussion, moderated by WGN radio host John Williams and featuring Jeffrey Sachs, Director of The Earth Institute at Columbia University and Peter Annin, author of *The Great Lakes Water Wars*, will cover topics ranging from water as it relates to poverty and health, water as a commodity, and how climate change is affecting water resources. Potential solutions to these problems will be addressed and local as well as global water issues will be highlighted.

MAY 13, 7pm • FREE

Pre-registration required.

DOZIN' WITH THE DINOS Overnight Family Program

Sue the T. rex is having a sleepover! Join us for a night of family workshops, tours and performances. Explore ancient Egypt by flashlight, prowl an African savannah with man-eating lions and take a stroll through the Royal Palace in Bamum,

Africa. Then spread your sleeping bag amidst some of our most popular exhibitions. The event includes an evening snack and breakfast in the morning.

MAY 15 & 29, 5:45pm–9am

See front cover for pricing details.
Pre-registration required.



JOHN WEINSTEIN

THE SECRETS OF COLLECTIONS:

PLANTS OF THE WORLD* Family Program

From the giant sequoias of California to the common duckweed plant, take a closer look at the many plants that exist in our world.

MAY 16, 10–11am

KRAFT STORY TIME* Family Program

Take a seat in the Crown Family PlayLab to hear a story and make an art project to take home—all in 20 minutes!

DAILY IN JUNE, 11:30am & 1:30pm

USDA SCIENTISTS AT THE FIELD Demonstration

Visit *Underground Adventure* and get a chance to see and feel different soil types!

JUNE 11, 11am–2pm

Free with admission to *Underground Adventure*.

FAMILY FIELD DAY: WATER SATURDAY* Family Program

Water play in the summer is always an adventure! Bring your family to The Field Museum for a fun-filled day of scientific demonstrations, family workshops on water conservation, and hands-on explorations of water ecosystems.

JUNE 20, 11am–2pm

CAFÉ SCIENCE: WATER Adult Program

Did you know that the Great Lakes contain 20% of the world's fresh water supply? Join Field Museum scientist Dr. Scott Demel at the Hopleaf Bar to chat about local and global water issues. Share your thoughts on water usage, water conservation, and water as a commodity.

JUNE 25, 7pm • FREE • 5148 N. Clark

DOZIN' WITH THE DINOS Overnight Family Program

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THE AZTEC WORLD

THROUGH APRIL 19, 2009



Trace the rise and fall of the Aztec world and explore the grandeur one of the world's greatest civilizations, exclusively at The Field Museum.

This exhibition was organized by The Field Museum, Chicago, in collaboration with the CONACULTA- INAH.

Major Sponsor: Exellen Corporation

YELLOWSTONE TO YUKON: FREEDOM TO ROAM

THROUGH JULY 5, 2009

Trek through the Rockies with award-winning nature photographer Florian Schulz, and discover the ambitious efforts to preserve one of the last, largely intact mountain ecosystems left in the world.



Yellowstone to Yukon: Freedom to Roam was organized by the Burke Museum of Natural History and Culture at the University of Washington and The Mountaineers Books Center in collaboration with the Yellowstone to Yukon Conservation Initiative.

This exhibition is sponsored by the Legacy Fund.

MASTERPIECES OF ANCIENT JEWELRY: EXQUISITE OBJECTS FROM THE CRADLE OF CIVILIZATION

THROUGH JULY 5, 2009

Travel back through 5,000 years of human history as you discover the delicate beauty, intricate details and the elaborate labor behind exquisite jeweled objects from the Ancient Middle East, now on display at The Field Museum.

Masterpieces of Ancient Jewelry was organized by the International Jewelry Institute.

Exhibition support provided by Crown Family Fund and Field Museum. 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World's Oldest Turtle Fossil Reveals How Shell Evolved

With hard bony shells to shelter and protect them, turtles are unique and have long posed a mystery to scientists who wonder how such an elegant body structure came to be.



MARLENE HILL DONNELLY, THE FIELD MUSEUM

*An artist's rendering of *Odontochelys* shows the turtle's shell on his belly, while his back was exposed.*

IF YOU'D LIKE TO LEARN MORE ABOUT ANCIENT AQUATIC LIFE, BE SURE TO VISIT EVOLVING PLANET WHERE YOU CAN SEE TURTLE, FROG, PLANT, AND FISH FOSSILS. THESE FOSSILS WERE ALL TAKEN FROM A SITE IN SOUTHWEST WYOMING, KNOWN AS FOSSIL LAKE.

Since the age of dinosaurs, turtles have looked pretty much as they do now with their shells intact, and scientists lacked conclusive evidence to support competing evolutionary theories. Now with the discovery in China of the oldest known turtle fossil, estimated at 220 million years old, scientists have a clearer picture of how the turtle got its shell.

Working with colleagues in China and Canada, Field Museum scientist Olivier Rieppel, PhD, has analyzed the Chinese turtle fossil, finding evidence to support the notion that turtle shells are bony extensions of their backbones and ribs that expanded and grew together to form a hard protective covering.

The fossilized turtle ancestor, dubbed *Odontochelys semitestacea* (translation: half-shelled turtle with teeth), likely lived in the water rather than on land.

Prior to the discovery of *Odontochelys*, the oldest known turtle specimen was *Proganochelys*, which was found in Germany. Because *Proganochelys* has a fully-formed shell, it provides little information about how shells were formed.

Odontochelys is helpful because it is the first turtle with an incomplete shell. The shell is an evolutionary innovation. It's easier to explain how it evolved by analyzing an intermediate example.

Some contemporary reptiles, such as crocodiles, have skin with bony plates; this was also seen in ancient creatures such as dinosaurs. Some researchers theorized that turtle shells started as bony skin plates, called osteoderms, which eventually fused to form a hard shell.

But *Odontochelys* has no osteoderms and it has a partial shell extending from its backbone. It also shows a widening of ribs. Therefore, the world's oldest turtle fossil tells scientists to forget about turtle ancestors covered in bony plates. **ITF**

'The shell is an evolutionary innovation.'



GN91017 430/JOHN WEINSTEIN

Rowe Family Curator of Evolutionary Biology Olivier Rieppel, PhD, contributed this Scientist's Pick.

Museum Inspires New Visions for a Sustainable Chicago Region

By Jennifer Hirsch, PhD, Division of Environment, Culture, and Conservation (ECCo)

How can we learn from the past to offer creative solutions for the environmental challenges facing the Chicago region today? The Field Museum's division of Environment, Culture, and Conservation, together with Lake County Forest Preserves and Friends of Ryerson Woods, recently addressed this question with a new program called New Allies for Nature and Culture.



Field Museum partners are engaged in youth programs that connect outdoor activities with lessons about cultural heritage.

The program used the Museum's resources to help planning agencies, environmental and community organizations, ethnic museums, and cultural centers create new visions for the region that benefit people and nature. New Allies was inspired by the Museum's *Ancient Americas* exhibition, which provides a cultural perspective on how the relationship between people and their environments has changed through history.

New Allies identified common concerns such as youth development, climate change, economic development, health and food, and the arts. Thanks to New Allies, Chicago area organizations that have not traditionally worked together in the past have now joined forces to address these concerns.

For example, the Museum brought together two key consortia in the region that share an interest in engaging youth: the Chicago Cultural Alliance, a partnership of over 20 ethnic museums and cultural centers, and Chicago Wilderness, a partnership of over 220 conservation organizations. The Alliance used a grant from Chicago Wilderness to connect cultural heritage with outdoor activities. One Alliance member created an intergenerational heritage garden in Bronzeville that draws on the history of African stewardship of the land. As youth planted and harvested traditional African vegetables, including squash, okra, and corn, they received mentoring from senior citizens who had migrated to Chicago from the South.

New Allies also has influenced the development of a research partnership between The Field Museum, the City of Chicago Department of Environment, Northwestern University, the US Forest Service, and community-based organizations aimed at identifying strategies that will engage residents from across the city in the Chicago Climate Action Plan. The plan aims to reduce greenhouse gas emissions to 80 percent below 1990 levels by 2050. The research will suggest how to link the priorities of the plan, such as energy efficiency and improved transportation options, with residents' most pressing concerns, as well as reveal key networks for communicating information.

Through initiatives like New Allies for Nature and Culture, the Museum's resources and collections are providing important tools for turning today's challenges into opportunities to protect our natural and cultural resources so that they are maintained for generations to come. **ITF**

New Allies for Nature and Culture is sponsored by Boeing.
Additional Support by Grand Victoria Foundation.

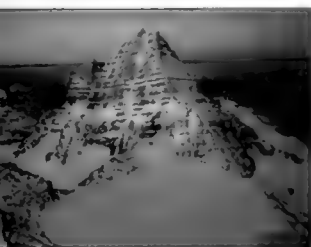
Yellowstone to Yukon: Freedom to Roam

Photo Exhibition Now Through July 5

By Amy Sumrall, Writer



In April 2008, Chicago police faced an unusual situation when they encountered and shot a cougar roaming the city's streets. However, this is an all-too-common occurrence in the western United States and Canada, where growing human populations have destroyed protected habitats, and wild animals that wander into towns and cities meet almost certain injury or death.



The Field Museum's new exhibition, *Yellowstone to Yukon: Freedom to Roam*, showcases 29 large-scale, color photographs by German wildlife photographer Florian Schulz that capture the beauty of animals in their natural surroundings and show the need for continuing habitat conservation. Schulz's panoramic photos of natural landscapes taken at sunrise and sunset and throughout multiple seasons illustrate the majestic beauty and romance of the preserved lands in the Yellowstone to Yukon region. The exhibition also explains the mission of the Yellowstone to Yukon Conservation Initiative (Y2Y) that is dedicated to creating and maintaining a connected landscape

across the Rocky Mountains, so that wildlife can migrate and animals and humans can co-exist. Y2Y brings people together to work on preserving and restoring the unique natural heritage of the Rockies.

Currently, much of the region between Yellowstone National

Park and Canada's Yukon Territory is fragmented into islands of wilderness that do not provide adequate roaming land for animals, especially large mammals such as grizzlies, wolves, and caribou. With only disconnected parcels of protected areas, the animals grow more vulnerable to inbreeding, disease, food shortages, and competition from other species—including humans. Y2Y hopes

to link these wilderness areas with protected land bridges, structural bridges over highways, and agreements between diverse organizations such as national parks, Native American reservations, ranchers, and conservation groups.

Visitors to the exhibition will be able to see a video on Y2Y that shows how The Field Museum is involved in similar conservation projects in Peru. Though Peru is home to Manu National Park and Cordillera Vilcabamba (a small range of the Andes Mountains), until recently there was still a large expanse of land between the two that was unprotected. Following a Rapid Biological Inventory in 2004, the Museum established that the area is home to at least 45 large mammal species, 70 fish species, 100 amphibian and reptile species, and 600 species of bird. With this evidence, the Peruvian government established the Megantoni National Sanctuary—an area over 10,000 square miles that connects Manu to Vilcabamba. Research such as this shows the importance of connecting protected areas, here in the United States and around the world. **ITF**

This exhibition is sponsored by the Legacy Fund



PHOTOGRAPHS BY FLORIAN SCHULZ

DON'T MISS YOUR CHANCE
TO TAKE PART IN AN
ARTIST'S WALKTHROUGH
WITH FLORIAN SCHULZ
ON SATURDAY, MARCH 21.
SEE PROGRAM CALENDAR FOR
MORE INFORMATION.

'Photos of natural landscapes taken at sunrise and sunset... illustrate the majestic beauty and romance of the preserved lands.'

Tawani Foundation Gift Creates Robert A. Pritzker Center for Meteorites and Polar Studies

By Sheila Cawley, Vice President, Institutional Advancement

When you hear the phrase “polar studies,” the first thoughts that may come to mind are polar bears and penguins, but polar studies encompasses much more than that. In fact, Antarctica is prime hunting ground for meteorites, because in many regions of thick ice, the only rocks found on the surface are meteorites. Antarctica is also a prime natural laboratory to study the effects of global warming and other forms of pollution. Now, thanks to a gift worth over \$7 million, the Museum can further our polar studies research.



Drs. Paul Siepera (left) and Lance Grande examine meteorites.

James A. Pritzker, founder of the Tawani Foundation, presented the gift that establishes a permanent center for the study of meteorites and polar science in the Museum’s Geology Department. Pritzker named the center in honor of his father Robert A. Pritzker, a Life Trustee of The Field Museum.

The Robert A. Pritzker Center for Meteorites and Polar Studies (which is not an exhibition) will endow a curator, an adjunct curator, and the operational needs of the Center. The gift also includes the remarkable DuPont and Planetary Studies Foundation meteorite collection which, when combined with the existing Museum collection, creates the largest non-government-owned meteorite collection in the world.

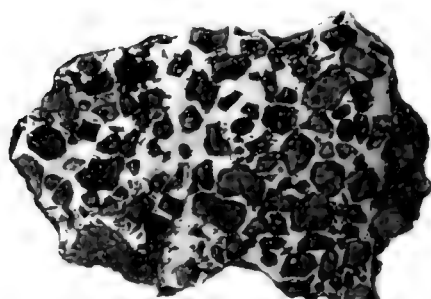
“The study of meteorites and polar studies will be greatly enriched by the establishment of a center at The Field Museum. Our goal has always been to make the DuPont and Planetary Studies Foundation collections accessible to leading professionals in the field and to the public through an ambitious education program. The Center will also focus on the study of the polar regions and their relationship to global changes,” said Pritzker.

“The Field Museum is extremely honored and gratified by the Tawani Foundation’s strong support. It will add significantly to our impact as a center of discovery. Meteorites, in particular, have been a research specialty at the Museum since its founding in 1893. This gift solidifies our ability to remain a leader in this field,” said Lance Grande, PhD, Field Museum senior vice president and head of collections and research.

Paul Sipiera, PhD, president of the Planetary Studies Foundation will serve as adjunct curator of the Center. “I am pleased to reinvigorate my long

relationship with The Field Museum and to be a part of this very exciting program,” he said.

The Field Museum now has the world’s largest non-government meteorite collection.



The Museum will celebrate the establishment of The Robert A. Pritzker Center on April 18 with a special public program (see program calendar). The program will feature the preliminary findings of the Tawani 2008 International Antarctic Expedition, also funded by the Foundation. James A. Pritzker was among a team of world renowned scientists, explorers, and educators who participated in the expedition. During the program, members of the team will share their discoveries. For more information on the expedition, visit <http://expedition.tawanifoundation.org>. **ITF**

Relax While Exploring These Permanent Exhibitions

By Michelle Clayton, Director of Membership

Sometimes you may want a quieter experience when visiting The Field Museum. We've chosen some places that are off the beaten path, so you and your guests can enjoy a relaxing time. For a half-day visit, we suggest:



REBECCA REEVES GAINES

Plants of the World

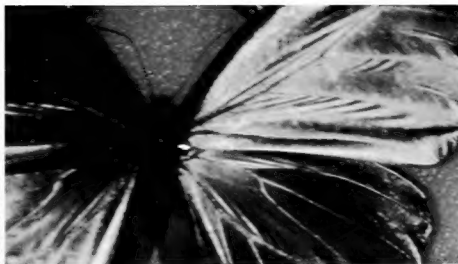
See the world's largest museum exhibition devoted solely to plants. Marvel at world-famous plant models, from algae to orchids. With more than 300 plants on display, you can learn some distinctive uses for plants, such as medicine, fuel, textiles, and even shelter. You won't believe these are models crafted from glass and wax!



GN89901_5C/MARK WIDHALM

Maori House

Brought from New Zealand in 1905, the house named Ruatēpupuke II is the only structure of its kind in the New World. The exquisitely carved dwelling represents an entire community including all the living and dead, and it is said to embody the beloved ancestor whose name it bears.



REBECCA REEVES GAINES

Small Treasures Gallery

Step into the intimate space that is currently showcasing the exhibition, *Insects: 105 Years of Collecting*. Come and see giant beetles and butterflies, and 40 million-year-old insects in amber.



294464_23D/JOHN WEINSTEIN

African Animal Dioramas

Near Rice Hall (at the end of the *Africa* exhibition) you'll find a group of animal dioramas that will take your breath away. Observe these large mammal recreations in naturalistic settings. Learn how these animals evolved, adapted and continue to survive in the Savanna.



GREGORY MERCER

Northwest Coast Indians

Compare life in the Arctic with life along a temperate coast, and see how these environments and resources led to two unique cultures. Explore how their differences impacted many aspects of people's lives including: art; fishing, hunting, and gathering; village and society; and their spiritual worlds. **ITF**

Redrawing the Bird Tree of Life

The Daniel F. and Ada L. Rice DNA Discovery Center is not only a place where Museum visitors can learn about the building blocks of life, it's also a window into the Pritzker Laboratory for Molecular Systematics. Scientists working in the Pritzker Lab are making breakthroughs in understanding the evolutionary history of animals and plants by analyzing DNA—the thread that connects all life on Earth.

Songbirds, like the cardinal, are closely related to parrots.



STEPHANIE WARE



SUSHMA REDDY

Colorful, daytime hummingbirds evolved from drab, nocturnal nightjars.

Shannon Hackett, PhD, and Sushma Reddy, PhD, are two Museum scientists who work in the Pritzker Lab. They have been collaborating with researchers from several institutions on a project called “Early Bird” to study the evolutionary history of modern birds. This landmark study benefited from technological advances that allowed Early Bird researchers to collect the largest dataset of DNA sequences ever assembled in order to decipher a robust “family tree” of birds.

Much of what we know about the biology of animals is based on studies of birds—everything from natural history to behavior, ecology, reproduction, speciation, vocalization, cognition, etc. Despite this, the evolutionary relationships of birds have remained elusive until now. The problem stems from how modern birds evolved. All the major groups of birds arose into their different forms very quickly (within a few million years) a very long time ago (65–100 million years ago). Today, we see very few common features between these groups to suggest their relationships—for example, parrots look only like other parrots; same for owls, penguins, and many other groups.

But appearances can be misleading. The Early Bird researchers have learned that many different-looking bird groups are actually closely related. Some of these unusual “cousins” include parrots and songbirds; flamingos and grebes; hummingbirds and nightjars. Similarly, many of the groups that do look and act similar turn out to not be closely related. For example, raptors such as falcons and hawks are independently evolved; owls and nightjars, both nocturnal groups, are unrelated; some birds adapted to aquatic lifestyles, such as tropicbirds, flamingos, and grebes are distinct from a separate group of waterbirds. These findings dramatically change the interpretation of many adaptations to different environments and behaviors.



NATALIE A. WRIGHT

The scientists also learned that much of bird classification is wrong. Many of the traditional orders are not natural groups. This is significant not only because it will affect how researchers design future evolutionary studies but also because many checklists and field guides that use this evolutionary arrangement of bird species will have to be re-organized.

Dr. Reddy explains, “As we continue to explore this revolutionary bird tree of life, we will undoubtedly discover other fascinating facets of avian evolution. Birds exhibit an incredible diversity and using this ‘family tree’ we can begin to understand how this variety originated. By better understanding how birds evolved we also better understand the features that have fascinated so many scientists and amateurs for centuries.” **ITF**

Sushma Reddy, PhD, Bucksbaum Postdoctoral Fellow contributed to this article.

REMEMBER YOU CAN WATCH DR. REDDY AND OTHER FIELD MUSEUM SCIENTISTS AS THEY WORK IN THE DNA DISCOVERY CENTER. STOP BY FROM 11am TO 12pm EVERY DAY, AND ONE OF OUR SCIENTISTS WILL ANSWER ALL YOUR QUESTIONS ABOUT DNA.

Founders' Council and Annual Fund News

Have you ever wanted to touch fossils from a recent dig? Meet a scientist who discovered a brand new species? Explore artifacts from Chicago's own World's Columbian Exposition in 1893? Your gift to The Field Museum's Founders' Council and Annual Fund brings exclusive, behind-the-scenes access to the Museum year round. Joining the Founders' Council and Annual Fund allows you to be a part of it all: special exhibition previews, private Museum tours, wide-ranging access to our scientists, and all the benefits of Museum membership. We welcome you to join us this spring and discover all that our Museum has to offer. With so much to see, there is surely something for everyone to enjoy!

The Field Museum is fortunate to have a loyal base of donors who recognize the importance of all the Museum offers to our community. Thank you to our Founders' Council and Annual Fund donor family for making 2008 such a successful year! Your gifts directly support our extraordinary exhibitions, educational outreach programs, and ongoing research conducted by our scientists all around the world. For more information on becoming a member of the Founders' Council or Annual Fund, please call our Annual Giving office at 312.665.7777 or contact Sara Murphy at smurphy@fieldmuseum.org.

Matching Gift Offered by Exelon Corporation

We invite you to participate in *Take One Step* when you visit The Field Museum. Exelon will match visitors' participation in *Take One Step*, up to \$200,000.

This voluntary program encourages visitors to offset the carbon emissions generated by an average trip to the Museum by buying a \$1 carbon credit. The money helps combat global warming through renewable energy technologies, restoration of degraded habitats, and conservation of intact forests. To learn more, visit fieldmuseum.org/carbonoffset.

Exelon's match will support the Museum's Renewable Energy Vehicle, which delivers educational materials about renewable energy to classrooms in the Chicago area.

Time to renew your membership?

Call 312.665.7700 • M–F 8:30am–4:30pm

Visit www.fieldmuseum.org/membership

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Final Days of *The Aztec World*!

Don't miss your chance to see the exclusive exhibition *The Aztec World* (through April 19). Remember, Museum members get a discount on the exhibition's audio tour, available in both English and Spanish. Be sure to take advantage of this offer while you're here!

© JEAN-MARC GIBBOUX



Visit Sacred Waters: India's Great Kumbha Mela Pilgrimage (March 6–July 19). Journey to India with photographer Jean-Marc Giboux, and discover the creativity and splendor of the largest human gathering on Earth, the Kumbha Mela pilgrimage. Be sure to read the next issue of ITF for more information on this new exhibition.

Sponsored by: Baker & McKenzie

Join Us for Members' Nights: March 12 & 13

Celebrate the 58th Annual Members' Nights from 5 to 10pm.

As a Field Museum member, be sure to take advantage of this exclusive event! Members' Nights give you an in-depth look at the inner workings of the Museum. Take this opportunity to explore the Museum after hours and discover something new and exciting. You and your family can step behind the scenes and receive an up-close experience with our many specimens. Non-public spaces such as the state-of-the-art Collections Resource Center, the dermestid beetle room, and the third and fourth floors of the Museum will be opened for exploration and discovery. Get a sneak peek at upcoming exhibitions and ask our scientists about their latest discoveries!

While you're here make sure to visit, *Real Pirates: The Untold Story of the Whydah from Slave Ship to Pirate Ship* as it tells the true story of the Whydah, from her historic transformation from slave to pirate ship to her final resting place on the ocean floor. (See page 4.)

To RSVP for this exclusive event, contact membership services at 312.665.7705.

Members' Nights are sponsored by Sears Holdings Corporation.

**The Field Museum
is now open:**

Monday–Saturday, 10am–5pm

Sunday, 11am–5pm

Special extended hours:

Spring Break

(March 21–April 19)

Monday–Sunday

9am–5pm

Summer

(June 15–Aug. 15)

Monday–Sunday

9am–5pm



LINDSAY KREMERAK

Shop for Jewelry Inspired by Ancient Designs

In celebration of the opening of *Masterpieces of Ancient Jewelry*, the Field Museum Main Store will be featuring jewelry inspired by the exhibition. You'll be wowed by pieces like this carnelian beaded necklace (shown at left). The companion book for the exhibition will also be available in the Main Store and online, where you can shop 24 hours a day.

Remember that all proceeds from the Stores directly support the Museum's public and scientific programs, and that all Field Museum members receive 10 percent off their purchases in the Museum Stores.